## EX PARTE OR LATE FILED



# **United States Telephone Association**

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January 13, 1995

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Mr. William F. Caton Acting Secretary Federal Communications Commission 1919 M Street NW - Room 222 Washington, DC 20554

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF SECRETARY

RE: Ex Parte Meeting

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Dear Mr. Caton:

As requested by the Common Carrier Bureau Tariff Division, attached is a copy of the support documentation for portions of the National Economics Research Associates report, titled "Economic Performance of the LEC Price Cap Plan: Reply Comments" filed with USTA's reply comments in this proceeding.

An original and two copies of this ex parte notice and attachment are being filed in the Office of the Secretary on January 13, 1995. Please include this notice and attached material in the public record of these proceedings.

Respectfully Submitted

Wice President

Legal and Regulatory

cc: Mark Uretsky

Anthony Bush

Alexander Belinfante

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TABLE 1 INPUT PRICES: 1984-1992

	LEC In	dustry	U.S. Industry				
		Input Price		TFP	GDP-PI	Input Price	
Year	Input Price	Annual	TFP	Annual	Annual	Annuai	
		Change		Change	Change	Change	Difference
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
1984	1.000		98.4				
1985	0.995	-0.5%	98.9	0.5%	3.5%	4.0%	4.5%
1986	0.992	-0.3%	99.9	1.0%	2.8%	3.8%	4.1%
1987	1.012	2.0%	100.0	0.1%	3.1%	3.2%	1.2%
1988	1.014	0.2%	100.6	0.6%	4.0%	4.6%	4.4%
1989	0.960	-5.3%	100.3	-0.3%	4.5%	4.2%	9.5%
1990	1.083	12.8%	100.0	-0.3%	4.6%	4.3%	-8.5%
1991	1.123	3.7%	98.9	-1.1%	4.0%	2.9%	-0.8%
1992	1.088	-3.1%	100.8	1.9%	3.2%	5.1%	8.2%

TABLE 2 INPUT PRICES: 1959-1984

	Telecom Input Price Index (1)	Telecom Input Price Change (2)	US TFP	GNP-PI 82 (4)	US TFP Change (5)	GNP-PI Change (6)	US Input Price Change (7)	Input Price Diff US-Teleco (8)
1959	0.429		70.6	37.6				
1960	0.439	2.4%	70.9	38.1	0.4%	1.3%	1.7%	-0.7%
1961	0.456	4.0%	72.4	38.4	2.1%	0.8%	2.9%	-1.1%
1962	0.470	3.1%	75.1	38.7	3.7%	0.8%	4.5%	1.4%
1963	0.493	4.9%	77.3	39.1	2.9%	1.0%	3.9%	-1.0%
1964	0.505	2.4%	80.5	39.6	4.1%	1.3%	5.4%	3.0%
1965	0.517	2.4%	83.0	40.1	3.1%	1.3%	4.4%	2.0%
1966	0.525	1.5%	85.5	41.1	3.0%	2.5%	5.5%	4.0%
1967	0.551	5.0%	85.8	42.1	0.4%	2.4%	2.8%	-2.2%
1968	0.585	6.1%	88.0	43.7	2.6%	3.8%	6.4%	0.3%
1969	0.601	2.7%	87.7	45.6	-0.3%	4.3%	4.0%	1.3%
1970	0.625	4.0%	87.4	47.2	-0.3%	3.5%	3.2%	-0.8%
1971	0.665	6.5%	90.2	48.8	3.2%	3.4%	6.6%	0.1%
1972	0.716	7.6%	92.8	50.3	2.9%	3.1%	6.0%	-1.6%
1973	0.763	6.6%	95.6	53.1	3.0%	5.6%	8.6%	2.0%
1974	0.800	4.8%	92.3	57.2	-3.5%	7.7%	4.2%	-0.6%
1975	0.874	9.3%	92.8	61.8	0.5%	8.0%	8.5%	-0.8%
1976	0.954	9.2%	96.4	65.1	3.9%	5.3%	9.2%	0.0%
1977	1.000	4.8%	98.5	68.4	2.2%	5.1%	7.3%	2.5%
1978	1.073	7.3%	99.2	72.7	0.7%	6.3%	7.0%	-0.3%
1979	1.104	2.9%	98.5	78.8	-0.7%	8.4%	7.7%	4.8%
1980	1.180	6.9%	96.2	86.1	-2.3%	9.3%	7.0%	0.1%
1981	1.310	11.0%	96.4	94.1	0.2%	9.3%	9.5%	-1.5%
1982	1.431	9.3%	93.3	100	-3.2%	6.3%	3.1%	-6.2%
1983	1.627	13.7%	95.4	104.1	2.3%	3.9%	6.2%	-7.5%
1984	1.656	1.8%	98.4	108.3	3.1%	3.4%	6.5%	4.7%

# TABLE 3 INPUT PRICE CHANGES AND DIFFERENCES 1960-1992 AND CONFIDENCE INTERVAL

US

Telecom

Diff

	Input Price	Input Price	US-Tel		
	Change	Change	Input Price		
	(1)	(2)	(3)		
1960	2.4%	1.7%	-0.7%		
1961	4.0%	2.9%	-1.1%		
1962	3.1%	4.5%	1.4%		
1963	4.9%	3.9%	-1.0%		
1964	2.4%	5.4%	3.0%		
1965	2.4%	4.4%	2.0%		
1966	1.5%	5.5%	4.0%		
1967		2.8%	-2.2%		
1968	6.1%	6.4%	0.3%		
1969	2.7%	4.0%	1.3%		
1970	4.0%	3.2%	-0.8%		
1971	6.5%	6.6%	0.1%		
1972	7.6%	6.0%	-1.6%		
1973	6.6%	8.6%	2.0%		
1974	4.8%	4.2%	-0.6%		
1975	9.3%	8.5%	-0.8%		
1976	9.2%	9.2%	0.0%		
1977	4.8%	7.3%	2.5%		
1978	7.3%	7.0%	-0.3%		
1979	2.9%	7.7%	4.8%		
1980	6.9%	7.0%	0.1%		
1981	11.0%	9.5%	-1.5%		
1982	9.3%	3.1%	-6.2%		
1983	13.7%	6.2%	-7.5%		
1984		6.5%	4.7%		
1985	-0.5%	4.0%	4.5%		
1986	-0.3%	3.8%	4.1%		
1987	2.0%	3.2%	1.2%		
1988			4.4%		
1989					
1990					
1991					
1992	-3.1%	5.1%	8.2%		
Average			0.7%		
Std Dev.			3.8%		
Count					
Upper 5% Confidence Interval Bound 2.1%					
• •	2.1% -0.6%				
Lower 5% Confidence Interval Bound -0.6%					

## TABLE 1: SOURCE

### Source:

- (1) LEC Input Price: Total Input Price, Filed as an attachment to Response of the United States Telephone Association to Ad Hoc's Motion to Compel and Motion for Extension of Time. CC Docket 94-1, June 2, 1994. Table 1.
- $(2) \qquad \frac{(1)_{t}}{(1)_{t-1}} 1$
- (3) Multifactor Productivy, Bureau of Labor Statistics, Multifactor Productivity Measures, 1991 and 1992, Table 1: Productivity and Related Measures, 1948-92.
- $(4) \qquad \frac{(3)_{t}}{(3)_{t-1}} 1$
- (5) Fixed-Weighted Price Index for Gross Domestic Product Percent Change, Economic Indicators, August 1994, U.S. Govt Printing Office.
- (6) U.S. Input Price Annual Change = (4) + (5) = U.S. TFP Annual Change + U.S. GDP-PI Annual Change
- (7) (6) (2) = U.S. Input Price Annual Change LEC Input Price Annual Change

### **TABLE 2: SOURCE**

Source:

- (1) Direct Testimony of Laurits Christensen for US West before the North Dakota Public Service Commission Case No. PU-2320-90-149, Tables 3-2 and 3-5
- $(2) \qquad \frac{(1)_t}{(1)_{t-1}} 1$
- (3) Multifactor Productivy, Bureau of Labor Statistics, Multifactor Productivity Measures, 1991 and 1992, Table 1: Productivity and Related Measures, 1948-92.
- (4) Fixed Weighted Price Index For GNP, 1982 weights, The WEFA Group
- (5)  $\frac{(3)_{t}}{(3)_{t-1}} 1$
- (6) 1960-1982:  $\frac{(4)_t}{(4)_{t-1}}$  1, 1983-1990: Fixed-Weighted Price Index for Gross Domestic

Product Percent Change, Economic Indicators, August 1994, U.S. Govt Printing Office.

- (7) (5) + (6)
- (8) (7) (2)

#### **TABLE 3: SOURCE AND NOTES**

#### Source:

- (1) 1960-1984: Column (2) of Table 2 1985-1992: Column (2) of Table 1
- (2) 1960-1984: Column (7) of Table 2 1985-1992: Column (6) of Table 1
- (3) (2) (1)
- 1. Formula for Average:  $\bar{x} = \frac{1}{n} \sum x_i$
- 2. Formula for Sample Standard Deviation:  $S = \sqrt{\frac{\sum_{i=1}^{n} (x_i \overline{x})^2}{n-1}}$
- 3. Formula for Upper and Lower Confidence Intervals  $\bar{x} \pm t_{95} \times \frac{S}{\sqrt{n-1}}$
- 4. The value of t<sub>95</sub> is from Judge et al. Introduction to the Theory and Practice of Econometrics, 2nd Edition, Table 2, p. 986, at n-1 degrees of freedom is 2.038.